

WHAT IS CLAIMED IS:

1. An apparatus for analyzing a physiological liquid comprising:

a measuring station;

a holder having:

a holder housing with first and second opposite end walls integral with a wall portion extending between said first and second end walls, the holder housing defining a holder area and having a center axis;

a holder member arranged in the holder housing and having a rotation axis identical to the housing axis, the holder member being rotatable around the rotation axis relative to the housing and having structural elements, the structural elements and the housing defining a plurality of compartments extending parallel to the axis; and

an opening in the holder housing providing access from the ambience to one of the compartments,

wherein, upon rotation of the holder member, one compartment at a time is aligned with the opening and thus accessible from the ambience, while the remaining compartments are inaccessible from the ambience;

a test device arranged in one of the compartments; and

a moving device for moving the test device between the one compartment accessible to the ambience and the measuring station.

2. An apparatus according to claim 1 in which the opening in the holder housing extends along the wall portion and through one end wall.

3. An apparatus according to claim 1 in which the holder member is tubular and in which the structural elements are fins extending radially toward the holder housing.

4. An apparatus according to claim 1 wherein a first position for the test device arranged in one of the compartments in the holder defines a position in which a test device which has not been used for analysis is positioned, wherein a second position for the test device defines a position in which a test device which has been used for analysis is positioned, and wherein a test device positioned in a compartment other than the compartment accessible from the ambience can not shift between the first and the second position.

5. An apparatus according to claim 4 wherein the holder housing has a bead which extends circumferentially around the wall portion perpendicular to the center axis of the housing, and wherein the test device has a bottom with at least two notches each notch being adapted to engage the bead on the holder housing so that the engagement of the bead with the first notch defines the first position for the test device, and so that the engagement of the bead with the second notch defines the second position for the test device.

6. An apparatus according to claim 4 comprising a detector means for detection of the position of the test device.

7. An apparatus according to claim 6 in which the detector means is a reflection detector having a light emitter and in which the bottom of the test device is reflective.

8. An apparatus according to claim 1 further comprising a sensor, capable of measuring a parameter of a sample of the physiological liquid present in the test device, positioned so that the test device and the sensor are in operational communication when the test device is positioned in the measuring station.

9. An apparatus according to claim 8 wherein the sensor is an optical sensor.

10. An apparatus according to claim 1 further comprising a data reading means and the holder further comprising a memory means for storing data about the holder and/or the test device, the data reading means adapted to read the data stored in the memory means.

11. An apparatus according to claim 1 wherein the test device comprises:

a sample entry port in fluid communication with a liquid sample path which extends between the sample entry port and a filter; and

a measuring chamber in fluid communication with the liquid sample path.

12. An apparatus according to claim 11 wherein the test device further comprises:

an inlet probe positioned at and in fluid communication with the sample entry port, the inlet probe having a first end proximate to the sample entry port and an opposite second end; and

an extending member extending between the sample entry port and the second end of the inlet probe to retain liquid wasted from the second end of the inlet probe.

13. A holder adapted to hold a plurality of test devices, wherein the holder has:

a holder housing with first and second opposite end walls integral with a wall portion extending between said first and second end walls, the holder housing defining a holder area and having a center axis;

a holder member arranged in the holder housing and having a rotation axis identical to the housing axis, the holder member being rotatable around the rotation axis relative to the housing and having structural elements, the structural elements and the housing defining a plurality of compartments extending parallel to the axis; and

an opening in the holder housing providing access from the ambience to one of the compartments,

wherein, upon rotation of the holder member, one compartment at a time is aligned with the opening and thus accessible from the ambience, while the remaining compartments are inaccessible from the ambience.

14. A holder according to claim 13 in which the opening in the holder housing extends along the wall portion and through one end wall.

15. A holder according to claim 13 in which the holder member is tubular and in which the structural elements are fins extending radially toward the holder housing.

16. A holder according to claim 13 wherein a first position for a test device arranged in one of the compartments in the holder defines a position in which a test device which has not been used for analysis is positioned, wherein a second position for the test device defines a position in which a test device which has been used for analysis is positioned, and wherein a test device positioned in a compartment other than the compartment accessible from the ambience can not shift between the first and the second position.

17. A holder according to claim 16 wherein the holder housing has a bead which extends circumferentially around the wall portion perpendicular to the center axis of the housing, and wherein the test device has a bottom with at least two notches each notch being adapted to engage the bead on the holder housing so that the engagement of the bead with the first notch defines the first position for the test device, and so that the engagement of the bead with the second notch defines the second position for the test device.

18. A method for determining a parameter of a sample of a physiological liquid, the method comprising the steps of:

arranging a plurality of test devices in a holder having:

a holder housing with first and second opposite end walls integral with a wall portion extending between said first and second end walls, the holder housing defining a holder area and having a center axis;

a holder member arranged in the holder housing and having a rotation axis identical to the housing axis, the holder member being rotatable around the rotation axis relative to the housing and having structural elements, the structural elements and the housing defining a plurality of compartments extending parallel to the axis; and

an opening in the holder housing providing access from the ambience to one of the compartments,

wherein, upon rotation of the holder member, one compartment at a time is aligned with the opening and thus accessible from the ambience, while the remaining compartments are inaccessible from the ambience;

loading, to a test device arranged in the compartment accessible from the ambience, the sample of the physiological liquid;

determining the parameter of the sample loaded;

rotating the holder member to arrange
the plurality of test devices in the compartments
inaccessible from the ambience; and
discarding the holder.